

## Anti-Sonic Hedgehog [5E1] Standard Size Ab01175-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

**Clone Number: 5E1** 

**Alternative Name(s) of Target:** shh; sonic hh; Q15465 **UniProt Accession Number of Target Protein:** Q63673

Published Application(s): Blocking, crystallisation, WB, ELISA, IHC

Published Species Reactivity: Rat, Human

Immunogen: This antibody was raised by immunizing mice with purified rat SHH amino-terminal domain

protein.

**Specificity:** This antibody is specific for the amino-terminal domain of rat SHH (SHH-N). It cross-reacts with the two other mammalian hedgehog ligands, Indian Hedgehog and Desert Hedgehog.

**Application Notes:** The binding specificity of this antibody for the amino-terminal fragment of SHH (SHH-N) has been confirmed in ELISA and Western blot analysis (Ericson et al, 1996). This antibody has been used to detect SHH in IHC analysis (Ericson et al, 1996). This antibody is able to inhibit hedgehog signalling, as it blocks the binding of all three mammalian Hh ligands to Ptc1 with low nanomolar affinity (Bosanac et al, 2009). In vivo, this inhibition is responsible for the observed growth retardation of HT55 an HT-29 xenografts in mice tumour models (Yauch et al, 2008). A Fab fragment derived from this antibody has been used in X ray crystallography analysis, in complex with human SHH (Maun, 2010).

**Antibody First Published in:** Ericson et al. Two Critical Periods of Sonic Hedgehog Signaling Required for the Specification of Motor Neuron Identity Cell, Volume 87, Issue 4, 15 November 1996, Pages 661-673 PMID:8929535

**Note on publication:** Describes the original generation of this antibody, and its characterisation in ELISA, WB and IHC analysis.

## **Product Form**

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified **Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

